

AD-A095 570

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2
19311C MLRS, MISSILE NUMBER V18-006, ROUND NUMBER V-133/DF-6, 2--ETC(U)
JAN 81

UNCLASSIFIED ERADCOM/ASL-DR-1167

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END
DATE
14 MRS
3-81
DRC

AD A095570

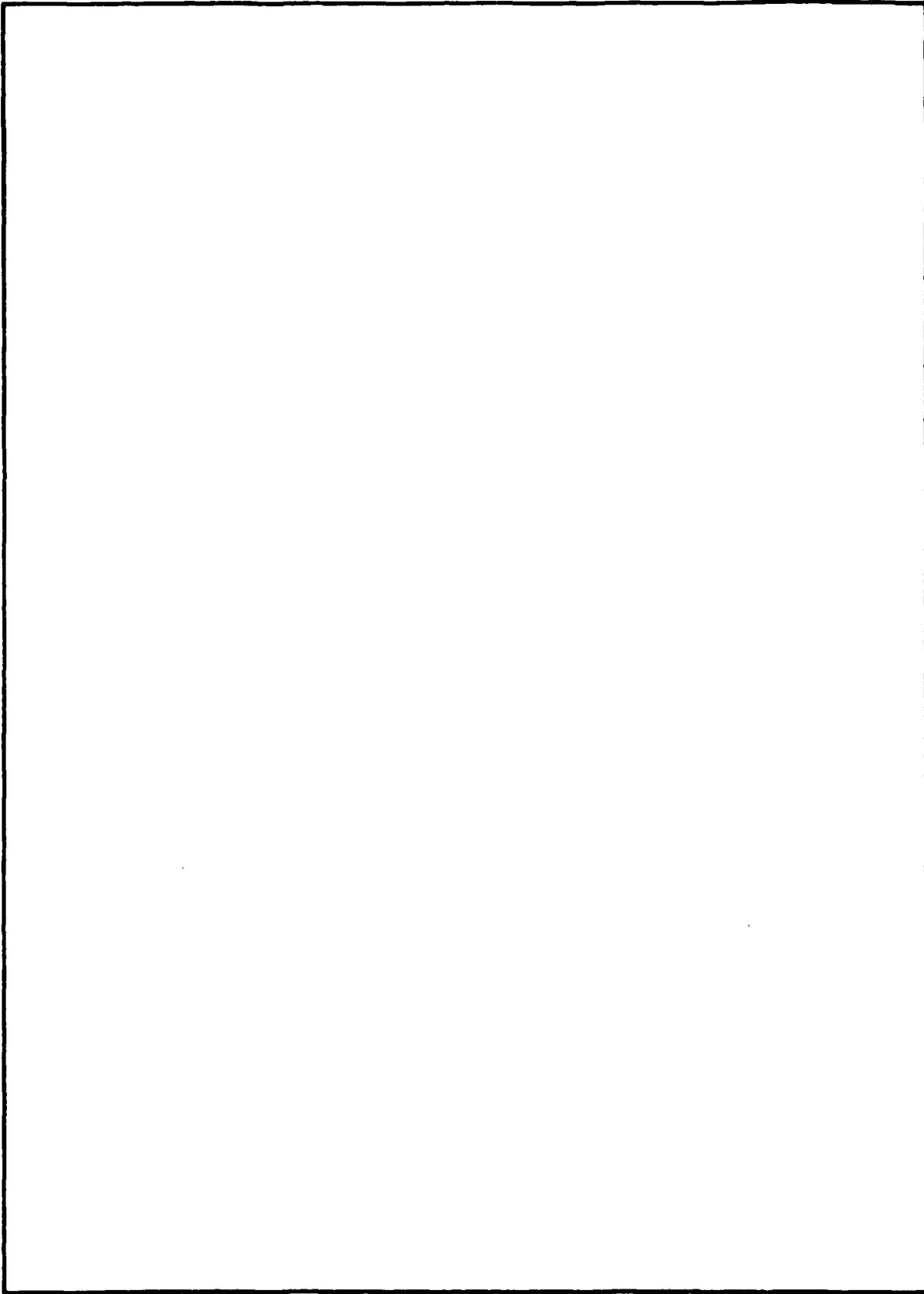


14 DECEMBER 1981

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19311C MLRS, Missile Number V18-006, Round Number V-133/DF-6 presented in tabular form.		

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)



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INTRODUCTION

19311C MLRS, Missile Number V18-006, Round Number V-133/DF-6, was launched from LC 33, White Sands Missile Range (WSMR), New Mexico, at 1130 MST on 26 Jan 81. The scheduled launch time was 1130 MST.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density (gm/m³), wind direction and speed, and cloud cover were made at the LC 33 met site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 fibal observation at:

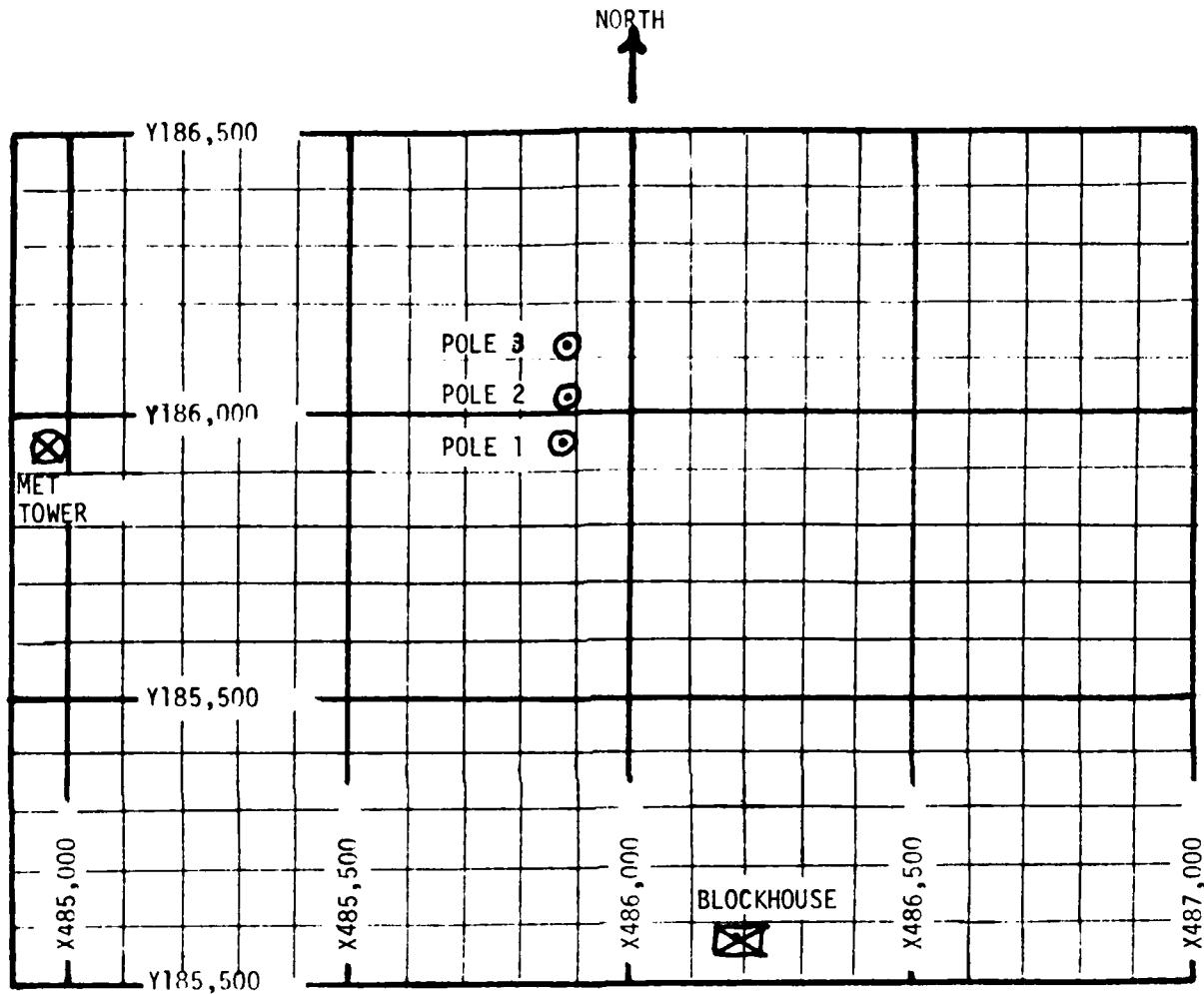
SITE AND ALTITUDE

LC 35	2 km
Nick	2 km

(b) Air structure data (rawinsonde) were collected at the following met sites. Data were collected from surface to as high as possible in 500-foot increments. (94,287 FT)

SITE AND TIME

WSD	1130
-----	------



1. MET TOWER - 4 Bendix Model T-120 Anemometers at 12 ft, 62 ft, 102 ft and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
 - (a) Pole #1 - 38.7 ft
 - (b) Pole #2 - 53.0 ft
 - (c) Pole #3 - 83.6 ft

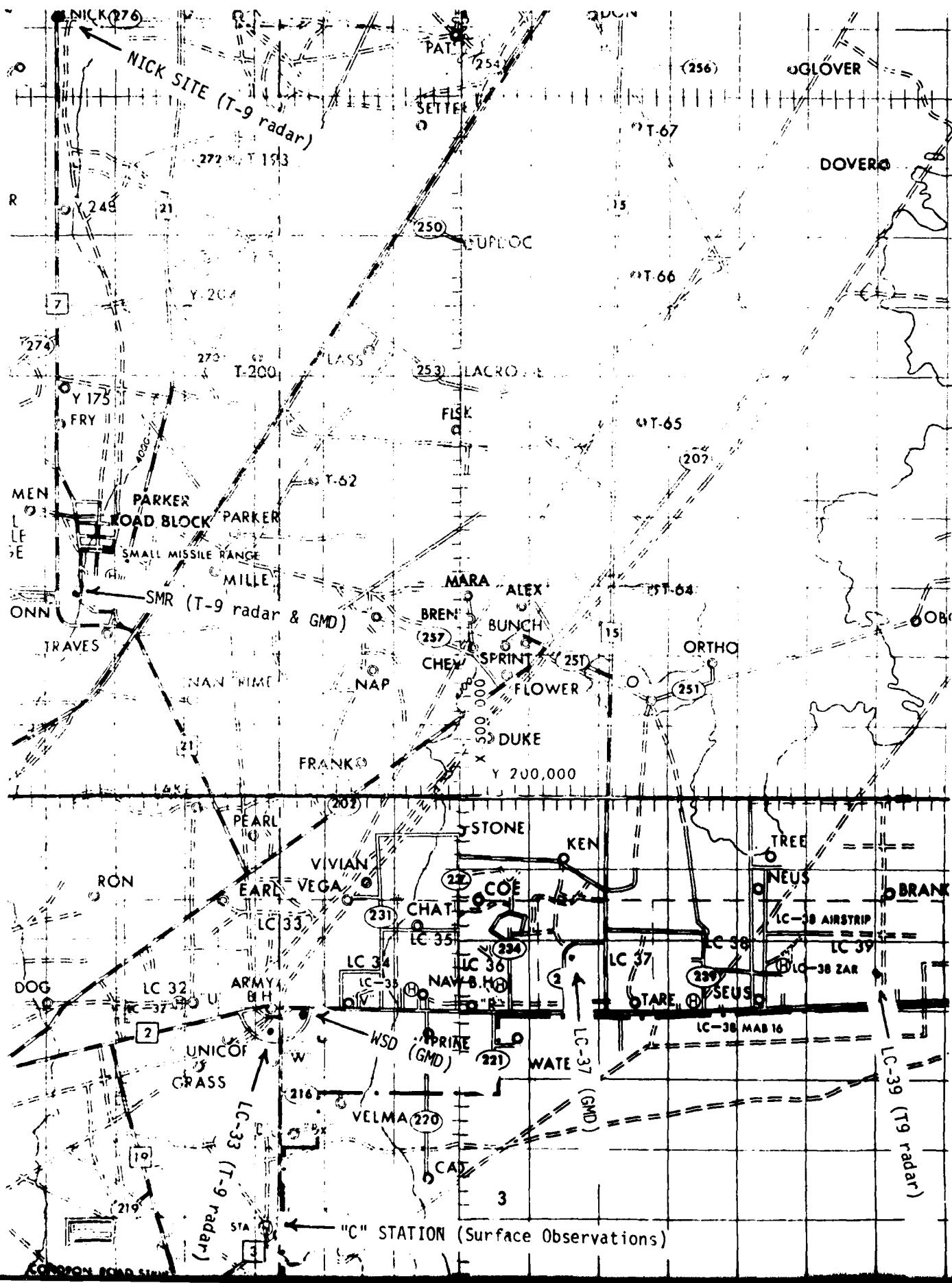


TABLE 1. Surface Observation taken at 1130 MST,
 26 January 1981, at LC 33, 19311C MLRS,
 Missile Number V18-006, Round Number V-133/DF-6

ELEVATION	3983	FT/MSL
PRESSURE	876.9	MBS
TEMPERATURE	14.3	°C
RELATIVE HUMIDITY	32	%
DEW POINT	-2.3	°C
DENSITY	1058.6	GM/M ³
WIND SPEED	13	KTS
WIND DIRECTION	306	DEGREES
CLOUD COVER	0/10/SC/5000 (1st) 4/CS/25000 (2nd)	AMT/TYPE/HGT

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	273	17	-30	300	14	-30	294	17
-20	285	13	-20	294	16	-20	300	19
-10	283	19	-10	294	13	-10	288	21
0.0	294	20	0.0	297	18	0.0	298	20
+10	303	17	+10	312	16	+10	300	17

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	294	12	-30	303	18
-20	298	11	-20	294	15
-10	306	12	-10	294	16
0.0	306	16	0.0	304	19
+10	306	14	+10	310	17

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	291	17	-30	286	21
-20	286	18	-20	288	17
-10	294	14	-10	295	16
0.0	294	18	0.0	290	17
+10	302	15	+10	295	16

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-35

DATE 26 Jan 81

TIME 1130 MST

COORDINATES (WSTM) X = 497,966.06 Y = 185,382.00 H = 4037.71

NOTE: WIND DIRECTIONS ARE REFERENCED TO
HEIGHTS ARE METERS AGL X OR FEET AGL

PILOT BALLOON MEASURED WIND DATA

TABLE 5

RELEASED FROM NICK

DATE 26 Jan 81

TIME 1130 MST

COORDINATES (WSTM) X = 470,734.56 Y = 255,775.64 H = 4126.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO
HEIGHTS ARE METERS AGL XX OR FEET AGL .

INITIAL ALTITUDE 3,000.0 FT.
26 JULY, 1913. 1130 HRS. CDT.
ASCENSION. 100. 55

116.10 ICANT LEVEL DATA

OPEN CLOUDS

WHITE SKIES

OLD IIC COORDINATES
32°40'04.3 LAT 04°
106°37'33 LONG 04°

TABLE 6

WILLIAMS ALTITUDE	PRESSURE, C. O. 44 IN. Hg. AT 1130 CDT	ATMOSPHERIC REFLECTIVE EFFICIENCY	REFLECTION EFFICIENCY OF SKIES, CLOUDY	REFLECTION EFFICIENCY OF SKIES, CLEAR	REFLECTION PERCENT
377.1	3680.0	14.0	-1.0	32.0	
656.6	4321.0	11.6	-2.4	37.0	
350.9	6851.5	10.0	-2.0	40.0	
764.0	7724.3	2.3	-6.1	53.0	
740.2	8562.1	4.4	-6.9	38.0	
720.0	9259.0	-2.3	-6.4	63.0	
735.2	9829.0	-3.5	-11.4	54.0	
700.0	10021.3	-3.5	-14.9	48.0	
692.6	10520.2	-2.9	-17.6	31.0	
686.2	10539.8	-1.7	-17.4	26.0	
667.2	11722.9	-2.5	-18.5	23.0	
630.2	12752.5	-5.4	-16.4	35.0	
593.2	14301.8	-9.4	-19.4	44.0	
532.4	17618.2	-15.5	-25.7	31.0	
630.0	18566.3	-17.0	-35.6	26.0	
662.8	20050.5	-21.4	-36.5	24.0	
451.0	21677.0	-21.4	-37.4	22.0	
430.6	23452.1	-27.7	-46.5	28.0	
352.4	26227.7	-34.9	-44.1	38.0	
355.6	26574.5	-35.6	-44.3	40.0	
320.2	29661.6	-41.0	-47.3	30.0	
300.0	30501.5	-43.5	-50.0	30.0	
277.0	32256.4	-43.1			
250.6	34451.0	-53.9			
248.2	34961.2	-54.7			
229.0	35349.3	-53.6			
220.8	36321.6	-55.7			
218.6	37279.1	-55.4			
200.0	39159.9	-57.2			
185.6	40664.2	-61.2			
162.1	41681.1	-56.7			
171.2	42370.2	-56.9			
166.0	42615.0	-56.9			
162.4	43674.3	-57.0			
156.0	44560.5	-55.5			
156.0	45138.5	-56.4			
136.7	47079.5	-57.0			
123.4	49225.3	-58.6			
119.0	50462.4	-57.2			
106.0	55077.7	-58.6			

STATION ALTITUDE 3,390 FEET
26 JAN. '51 1130 hrs. EST
ASCLUSION '50. 53

SIGNIFICANT CLOUD DATA

0250620055
WHITE 0.005

ELIMETRIC COORDINATES
52.40043 LAT NEG
106.37033 LONG NEG

TABLE 6 Cont'd

PRESSURE (IN. HG.)	TEMPERATURE AIR OF POINT BY 600'S CENIGRADE	REL. HUM. PERCENT
80.5	55.947.4	-6.9.9
81.6	57.011.6	-5.9.7
70.0	60.936.7	-5.9.3
66.6	62.269.4	-5.7.5
62.6	63.306.1	-5.9.4
57.0	65.025.5	-6.0.4
50.0	67.948.7	-6.8.9
46.0	69.671.7	-6.0.4
37.6	73.777.1	-5.3.9
30.0	78.653.4	-5.6.7
23.0	84.264.9	-5.3.7
20.0	87.234.1	-5.3.7
14.4	92.034.7	-5.1.9
14.4	94.237.2	-4.0.3

SITUATION ALTITUDE 3,370.00 FEET ASL
26 JUN. 61 1130 hrs, 1951
REFLUSION, NO. 53

OPERATIONAL
OZONE DEPTHS
WHITE SANDS

SOCIECTIC COORDINATES
32°40'04.3 LAT N
106°37'03.3 LONG W

Table 7

DEFINITION	PRESSURE	TEMPERATURE	REL.HUM.	DENSITY	SPD OF	WIND DATA	INFLUX
ALTITUDE	MM. OF INCHES	MM. OF INCHES	PERCENT	GM/CUBIC METER	SOUTH KNOTS	DIRECTION DEGREES (III)	OF REFRACTION
MSL FEET	MM. OF MILLIONS	MM. OF MILLIONS	CENTIGRADE	KILOMETERS	KNOTS	KNOTS	
3989.0	877.1	14.9	-11.6	32.0	1050.5	662.0	15.0
4000.0	876.6	14.6	-11.6	32.2	1050.2	661.8	14.9
4500.0	861.6	11.2	-2.6	38.6	1052.5	657.7	14.2
5000.0	845.3	9.6	-7.1	40.7	1059.2	655.6	13.7
5500.0	829.8	8.5	-3.5	42.9	1024.6	654.3	13.3
6000.0	814.5	7.0	-1.0	45.2	1010.7	652.8	13.6
6500.0	792.5	5.7	-4.6	47.5	996.8	651.2	14.0
7000.0	784.8	4.4	-5.2	49.7	983.1	649.7	14.4
7500.0	770.4	3.1	-5.8	52.0	969.7	648.1	14.9
8000.0	756.1	1.8	-6.3	54.6	950.1	646.0	15.4
8500.0	741.9	0.6	-6.8	57.6	942.6	645.1	15.6
9000.0	729.0	-1.3	-7.8	61.1	931.2	642.9	14.7
9500.0	714.2	-2.8	-9.6	65.2	918.8	641.6	14.3
10000.0	700.6	-3.5	-12.7	68.7	904.0	640.1	22.3
10500.0	687.2	-1.9	-17.7	28.5	892.0	631.9	22.9
11000.0	674.2	-2.2	-18.2	28.0	876.1	641.5	19.3
11500.0	661.4	-2.9	-18.4	29.4	852.0	640.0	20.8
12000.0	649.6	-3.9	-16.9	31.4	838.8	639.3	19.1
12500.0	636.4	-4.9	-16.4	33.6	825.7	638.3	21.7
13000.0	624.1	-6.0	-16.5	36.4	813.5	637.0	21.3
13500.0	612.1	-7.3	-18.4	39.3	801.0	635.4	20.8
14000.0	600.2	-8.6	-19.1	42.2	789.8	635.9	21.1
14500.0	588.5	-9.8	-17.8	43.6	776.0	632.4	20.3
15000.0	576.9	-11.0	-21.0	45.2	766.0	630.7	1.000101
15500.0	565.6	-12.1	-22.2	47.7	754.0	631.0	21.2
16000.0	554.4	-13.2	-23.5	49.1	742.0	629.7	20.0
16500.0	543.5	-14.3	-24.5	41.6	731.1	626.9	20.8
17000.0	532.8	-15.5	-25.7	41.0	719.9	625.2	23.1
17500.0	522.1	-16.6	-23.0	36.5	703.6	624.1	21.3
18000.0	511.6	-17.7	-30.5	41.4	697.5	622.7	20.8
18500.0	501.3	-18.9	-33.2	26.6	686.6	621.5	27.2
19000.0	491.2	-19.6	-30.3	55.5	674.0	620.5	27.1
19500.0	481.2	-20.2	-35.0	25.0	662.5	619.7	26.9
20000.0	471.4	-20.8	-35.6	20.5	650.7	618.9	27.7
20500.0	461.0	-21.4	-36.6	23.6	639.0	618.2	27.0
21000.0	452.4	-21.9	-37.2	22.2	625.9	618.2	31.4
21500.0	442.1	-22.5	-37.8	22.9	615.5	617.1	27.0
22000.0	434.0	-23.4	-30.3	23.0	605.2	615.7	26.9
22500.0	425.0	-24.5	-39.4	25.6	595.4	614.3	26.3
23000.0	415.2	-25.6	-30.4	26.0	585.6	613.0	45.7

STATION ALTITUDE 5489.00 FEET MSL
26 JAN. 31 1130 hrs 51ST
REGIONS 1064 140.

102°E AIR DATA
0260020055
WHITE SANDS
CLOUDS 1064 140.

GEODETIC COORDINATES
32.49943 LAT 106
106.37033 LONG 106

Table 7 Cont'

GEODETIC ALTITUDE IN FEET	PRESSURE IN MILLIBARS	TEMPERATURE AIR DEPART DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GRAMS/CU METER	WIND SPEED KNOTS DEGREES (T _W)	WIND DATA SPEED, KNOTS DIRECTION DEGREES (T _W)	INDEX OF REFRACTION
25500.0	401.0	-26.7	40.0	27.1	576.1	611.0	48.4
24900.0	393.2	-27.9	46.0	23.2	566.3	610.2	26.8
24500.0	393.7	-29.4	41.3	30.4	558.4	608.2	26.8
23600.0	382.4	-31.0	42.0	32.6	550.1	606.3	266.9
23500.0	374.3	-32.6	42.8	34.8	542.0	604.3	265.0
23600.0	365.4	-34.2	43.7	37.0	534.0	602.3	262.9
23500.0	356.5	-35.5	44.2	39.2	525.1	600.8	261.1
23700.0	350.7	-36.3	44.7	41.4	515.9	599.5	259.0
23500.0	343.1	-37.5	45.5	42.5	507.0	598.1	258.1
23600.0	335.6	-38.6	45.9	45.6	498.3	596.7	256.7
23500.0	326.2	-39.7	46.5	47.6	489.8	595.2	254.2
23600.0	321.1	-40.9	47.2	49.7	481.5	593.8	254.2
23500.0	313.9	-42.1	48.3	50.0	473.2	592.2	253.1
30000.0	307.0	-43.3	49.4	50.0	465.1	589.7	254.7
30500.0	300.1	-44.5	50.6	50.0	457.2	589.1	256.6
31000.0	292.3	-45.5	50.3	50.9**	448.9	587.8	254.9
31500.0	289.7	-46.5	50.2	21.6**	440.8	586.5	250.5
32000.0	290.2	-47.6	50.1	7.3**	432.8	585.1	250.3
32500.0	275.8	-48.7	48.7	42.5	585.6	250.0	70.3
33000.0	267.5	-50.1	48.6	41.7	581.9	250.1	71.8
33500.0	261.9	-51.4	48.9	41.0	580.1	250.6	65.0
34000.0	255.3	-52.7	49.0	40.3	578.4	250.2	62.6
34500.0	249.4	-54.0	49.0	39.5	576.7	247.4	61.1
35000.0	243.6	-54.6	49.4	387.9	576.2	244.0	59.9
35500.0	237.9	-55.9	49.9	378.0	576.3	240.6	61.2
36000.0	232.3	-56.6	50.6	371.0	575.4	237.3	63.0
36500.0	226.9	-55.6	50.6	363.4	574.0	236.3	65.1
37000.0	221.5	-57.5	50.6	356.5	574.8	235.5	67.1
37500.0	216.3	-55.6	50.9	346.4	574.0	235.6	67.2
38000.0	211.2	-56.1	50.1	339.0	574.0	237.7	67.3
38500.0	206.2	-56.6	50.6	321.7	573.3	235.7	65.4
39000.0	201.3	-57.1	50.6	326.6	572.7	239.7	63.6
39500.0	196.6	-57.9	50.6	316.1	571.0	241.0	65.0
40000.0	191.9	-58.9	50.9	311.9	570.2	245.0	68.3
40500.0	187.3	-59.9	50.9	305.9	568.9	246.0	73.0
41000.0	182.8	-57.6	50.6	295.2	572.3	247.0	76.7
41500.0	178.5	-56.8	50.6	287.3	573.1	247.8	72.8
42000.0	174.3	-56.0	50.3	280.0	573.0	247.0	68.6
42500.0	170.1	-56.7	50.1	273.8	573.2	247.1	62.7
43000.0	166.1	-56.1	50.1	269.6	574.9	245.0	57.8

** AIR LAYER OUT. AIR OUT. REL. HUMIDITY VALUE WAS 0.81. IN LAYER 10600 FT.

STATION ALTITUDE 34959.00 FT 1 APR.
26 JAN. 01 1130 hrs. 1971
ASCAIUS 100. 53

WEATHER AIR DATA
0260020055
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT. 06
106.37055 LONG. 06

Table 7 Cont'

GEODETIC PRESSURE ALTITUDE IN FEET	PRESSURE IN MILLIBARS	TEMPERATURE AT DEWPOINT DEGREES CELSIUS	REL. HUM. PERCENT	INFRARED SPECTRUM GR/CURRIC MILLIBARS	INFRARED SPECTRUM SOUND KNOTS	WIND DIRECTION DEGREES (14)	WIND SPEED KNOTS	WIND X OF REFRACTION
63300.0	162.2	-57.0	261.4	572.3	247.0	56.0	1.0000000	
64000.0	159.4	-56.5	254.4	575.7	247.5	54.3	1.0000007	
64500.0	156.6	-55.6	247.6	574.6	246.0	52.6	1.0000055	
65000.0	153.9	-55.2	242.4	573.9	249.7	51.0	1.0000044	
65500.0	147.4	-55.5	237.1	575.4	251.2	49.6	1.0000058	
66000.0	145.9	-56.0	231.6	575.2	252.7	48.2	1.0000042	
66500.0	140.5	-56.8	226.3	575.0	254.2	46.3	1.0000040	
67000.0	137.2	-57.0	221.1	572.8	255.6	46.5	1.0000049	
67500.0	134.6	-56.7	215.7	575.1	257.1	44.4	1.0000040	
68000.0	130.8	-56.4	210.3	573.6	258.5	44.4	1.0000047	
68500.0	127.1	-56.1	205.0	574.0	259.4	46.0	1.0000046	
69000.0	124.7	-56.7	199.9	574.4	260.2	49.4	1.0000045	
69500.0	121.8	-55.9	195.2	574.5	260.7	49.0	1.0000043	
70000.0	118.9	-56.3	191.1	573.6	261.2	48.6	1.0000043	
70500.0	116.1	-56.3	187.0	573.0	261.6	46.6	1.0000042	
71000.0	113.4	-57.3	182.9	572.4	262.9	41.1	1.0000041	
71500.0	110.7	-57.5	178.8	572.1	264.4	35.7		
72000.0	108.0	-57.0	174.7	571.7	265.0	33.1	1.0000046	
72500.0	105.5	-56.5	170.6	571.4	266.9	31.1	1.0000040	
73000.0	103.0	-56.3	166.9	571.1	267.4	31.4	1.0000047	
73500.0	100.5	-56.5	163.2	570.7	265.0	36.0	1.0000046	
74000.0	98.1	-56.1	159.5	570.3	269.4	40.7	1.0000046	
74500.0	95.6	-59.8	155.9	570.0	266.4	44.2	1.0000045	
75000.0	93.5	-59.4	152.4	569.6	264.0	47.7	1.0000034	
75500.0	91.3	-59.7	148.9	569.2	265.4	46.1	1.0000033	
76000.0	89.1	-59.9	145.5	569.0	266.1	41.3	1.0000032	
76500.0	86.9	-59.5	141.8	569.4	271.3	36.4	1.0000032	
77000.0	84.9	-59.2	138.2	569.8	275.2	31.3	1.0000031	
77500.0	82.8	-56.9	134.7	570.2	266.6	26.6	1.0000030	
78000.0	80.9	-58.7	131.4	570.5	264.7	22.9	1.0000029	
78500.0	78.9	-58.6	126.5	570.5	279.1	19.5	1.0000029	
79000.0	77.0	-56.0	125.2	570.2	270.6	16.8	1.0000028	
79500.0	75.2	-59.6	122.4	570.1	307.2	14.4	1.0000027	
80000.0	73.4	-59.1	119.2	570.0	313.4	13.4	1.0000027	
80500.0	71.7	-59.2	116.7	569.4	314.3	13.0	1.0000026	
81000.0	70.0	-59.3	113.9	569.7	314.5	12.6	1.0000025	
81500.0	68.3	-59.5	110.6	570.0	311.0	12.4	1.0000025	
82000.0	66.7	-57.6	107.6	571.9	308.6	12.3	1.0000024	
82500.0	65.1	-57.9	105.5	571.0	307.0	11.9	1.0000023	
83000.0	63.5	-56.9	103.3	570.4	307.4	11.5	1.0000023	

TABLE 7 Cont'd.

GEOPHYSICAL PROPERTY	PRESSURE ATMOSFERIC	TEMPERATURE DEGREES CELSIUS	WIND VELOCITY MILLIMETERS PER SECOND	WIND DIRECTION DEGREES TRUE	WIND VELOCITY KNOTS		DIRECTION DEGREES TRUE	WIND VELOCITY KNOTS	INFLUX OR REFLECTION
					PERCENT	PERCENT			
0.50000.0	00.0	-59.5	101.1	569.4	307.4	307.4	11.0	1.000025	
0.50000.0	00.5	-59.4	08.6	369.0	507.5	10.4	1.00002		
0.50000.0	50.1	-60.1	06.6	368.0	507.5	9.0	1.000025		
0.50000.0	50.7	-60.4	04.4	368.0	367.5	9.3	1.000021		
0.50000.0	50.3	-60.2	02.1	368.0	367.5	6.0	1.000021		
0.50000.0	50.9	-59.9	09.6	368.0	308.1	6.1	1.00002		
0.50000.0	50.6	-59.6	07.5	369.2	310.1	6.6	1.000019		
0.50000.0	50.3	-59.4	05.3	369.6	313.2	5.4	1.000019		
0.50000.0	50.1	-59.1	03.2	369.9	339.0	2.1	1.000019		
0.50000.0	49.9	-58.9	01.1	367.0	365.0	2.5	1.000019		
0.50000.0	49.7	-59.4	79.5	367.0	103.0	5.2	1.000018		
0.50000.0	49.5	-59.8	77.6	367.0	107.5	7.4	1.000017		
0.50000.0	49.3	-60.3	60.3	368.4	109.7	9.2	1.000017		
0.50000.0	49.0	-59.9	45.3	368.9	111.9	7.6	1.000016		
0.50000.0	48.8	-59.1	44.2	72.0	1570.0	0.0	1.000016		
0.50000.0	48.6	-56.3	42.1	70.0	571.0	9.2	1.000016		
0.50000.0	48.1	-57.5	63.1	572.1	86.1	16.1	1.000015		
0.50000.0	41.2	-56.7	60.2	573.1	91.9	23.2	1.000015		
0.50000.0	41.0	-56.0	64.4	574.2	75.6	29.4	1.000014		
0.50000.0	39.2	-55.1	62.7	575.2	69.4	25.6	1.000014		
0.50000.0	36.3	-54.3	61.0	576.3	64.4	26.5	1.000014		
0.50000.0	37.4	-54.0	69.3	576.7	57.6	24.3	1.000013		
0.50000.0	36.5	-54.3	60.1	576.9	49.0	22.5	1.000013		
0.50000.0	35.7	-55.6	56.0	575.9	45.1	21.3	1.000013		
0.50000.0	34.8	-54.9	56.4	575.9	42.9	20.3	1.000012		
0.50000.0	34.0	-55.2	54.4	575.2	46.7	19.3	1.000012		
0.50000.0	33.2	-55.5	55.2	576.8	53.3	19.6	1.000012		
0.50000.0	32.4	-55.8	52.9	576.4	61.0	20.7	1.000012		
0.50000.0	31.7	-56.0	50.6	574.0	63.9	22.3	1.000011		
0.50000.0	30.9	-56.3	49.7	573.7	72.2	25.5	1.000011		
0.50000.0	30.2	-56.6	48.6	573.5	74.0	29.0	1.000011		
0.50000.0	29.5	-56.9	47.5	573.4	76.4	32.4	1.000011		
0.50000.0	28.8	-57.2	46.3	573.6	70.2	30.6	1.000010		
0.50000.0	28.2	-57.5	45.2	573.5	69.9	28.6	1.000010		
0.50000.0	27.6	-57.8	45.0	574.1	75.7	26.6	1.000010		
0.50000.0	27.0	-58.1	44.0	574.5	73.0	26.7	1.000010		
0.50000.0	26.4	-58.4	43.0	574.3	73.0	27.1	1.000010		
0.50000.0	25.8	-58.7	42.0	575.5	73.4	27.6	1.000010		
0.50000.0	25.2	-59.0	41.0	575.9	74.9	26.9	1.000010		
0.50000.0	24.6	-59.3	40.0	576.2	75.9	26.9	1.000010		

STATION, LATITUDE 34°30'00" FREE. SEC.
26 JAN. 61 1130 hrs HST
ACCELERATION NO. 5.3

WEIGHT AIR, 16.1A
0.7,000.2005
WEIGHT SOILS

STODIC COORDINATES,
32.40043 LAT deg
106.37033 LON deg

TABLE 7 Cont'

GEOPOTENTIAL HEIGHT	PRESSURE	TEMPERATURE	VEL. HUM.	INFRARED SPECTRUM	WIND DATA
ALTITUDE	MM	DEGREES	PERCENT	SOUTH	WIND DIRECTION SPEED KNOTS
MSL FLET	MILLIBARS	DEGREES	CLIMATE	WATER	REFRACTION:
83500.0	23.0	-54.0	37.9	570.6	91.1 35.4
84000.0	23.0	-53.8	37.0	570.9	89.7 38.1
84500.0	23.7	-53.7	36.1	577.1	86.5 40.0
85000.0	24.2	-53.7	35.3	577.1	95.7 41.0
85500.0	21.7	-53.7	34.5	577.1	86.4 42.6
86000.0	21.2	-53.7	33.7	577.1	76.5 42.0
86500.0	20.7	-53.7	32.9	577.1	72.1 41.6
87000.0	20.2	-53.7	32.1	577.1	69.1 42.0
87500.0	19.8	-53.6	31.3	577.3	65.0 43.3
88000.0	19.3	-53.5	30.6	577.6	67.0 44.0
88500.0	19.9	-53.1	29.3	577.9	60.5 45.6
89000.0	19.4	-52.9	29.1	578.2	66.3 45.2
89500.0	19.3	-52.6	29.4	578.5	66.5 44.4
90000.0	17.6	-52.4	27.7	578.9	60.2 44.5
90500.0	17.2	-52.1	27.1	579.2	67.0 40.0
91000.0	16.8	-51.9	26.4	579.5	65.1 36.1
91500.0	16.4	-51.6	25.8	579.6	67.6 31.5
92000.0	16.0	-51.4	25.2	580.1	71.3 26.8
92500.0	15.6	-51.2	24.5	580.4	60.5 1.000005
93000.0	15.3	-50.3	23.9	580.9	1.000005
93500.0	14.9	-50.2	23.3	581.7	22.7 1.000005
94000.0	14.6	-49.0	22.7	582.4	1.000005

STATION ALTITUDE 5,930.00 FT LST
26 JUN. 1130 hrs 5.3
KSC 15101 1.0. 5.3

FLIGHT LEVELS
12,000.000
10,000.000

FCU TIC COOK, JAMES
32.40043 LAT 146
106.37053 LONG E6

TABLE 8

PRESSURE, GRADIENT,	FLT	AIR DEGRADS	WATER	FL. DEGRADS	FL. DEGRADS	FL. DEGRADS
WILLIAMS	FLT	DEGRADS	DEGRADS	DEGRADS	DEGRADS	DEGRADS
85.0.0	4000.	10.0	-3.0	40.	250.0	13.0
800.0	0409.	5.7	-6.0	47.	270.7	14.0
750.0	d27.	1.4	-6.5	56.	279.9	15.5
700.0	10011.	-3.5	-12.0	40.	269.0	22.3
650.0	11939.	-3.0	-10.0	51.	280.7	20.1
600.0	13005.	-6.6	-10.1	62.	270.2	21.1
550.0	16197.	-13.7	-2.5	42.	259.7	22.4
500.0	18541.	-19.0	-53.6	26.	272.0	20.3
450.0	21009.	-21.5	-57.4	22.	270.2	32.3
400.0	25915.	-27.7	-40.5	28.	266.9	50.9
350.0	27002.	-36.4	-44.7	42.	259.5	45.5
300.0	30050.	-44.5	-50.0	50.	254.0	70.3
250.0	34376.	-53.0			247.9	61.2
200.0	39047.	-57.2			240.3	64.1
175.0	41607.	-58.0			247.9	69.8
150.0	45019.	-56.4			250.0	50.7
125.0	48014.	-55.8			260.0	49.1
100.0	53044.	-58.6			265.4	39.8
80.0	58031.	-58.0			266.9	21.6
70.0	60779.	-59.3			314.5	12.6
60.0	65956.	-54.0			307.4	10.2
50.0	67679.	-58.6			75.4	2.0
40.0	72204.	-55.0			75.0	24.5
30.0	78319.	-56.7			75.0	29.8
25.0	82129.	-54.6			66.0	29.6
20.0	86631.	-53.7			63.7	42.5
15.0	92940.	-50.3				

DATE
TIME